

Handout#2: Behaviorism

I. Behaviorism

In general, the behaviorist holds that:

- (b1) Having a mind is reducible to having certain behavioral dispositions.
- (b2) Mental states are nothing over and above behavioral dispositions.

What is a dispositional state?

A dispositional state of an object(/event/process) is a tendency to exhibit a response to an antecedent condition or stimulus.

Object *o* has dispositional property *d* =_{df} Under normal conditions, if *o* is in condition *C* at *t*₀, then *o* is in state *R* at *t*₁.

['under normal conditions' is often referred to as a *ceteris paribus* clause]

examples

fragility:

x is fragile iff *ceteris paribus* if *x* is struck, *x* will break.

solubility:

x is soluble iff *ceteris paribus* if *x* is placed in water, *x* will dissolve.

being ticklish:

x is ticklish iff *ceteris paribus* if *x* is tickled, *x* will laugh, contort, and try to get away.

II. Some motivations for behaviorism

- The problem of "other minds" – access to other people's mental states is problematic. Skepticism/solipsism can be avoided by analyzing mental states as behavioral states.
- Problems with dualism (esp. causal relations problem)
- Difficulties with introspective accounts of psychology, which were popular in the late 19th and early 20th century (esp. in the work of William James)
- Ontological or methodological parsimony

III. Three types of behaviorism

Logical behaviorism:

(Strong) The meaning of psychological expressions/statements can be given purely in terms of observable physical behavior.

(Weak) There exist entailments between psychological statements and behavioral statements.

Ontological behaviorism: Mental states *just are* behavioral dispositions.
There are no mental facts over and above facts about behavioral dispositions.

Methodological/scientific behaviorism: Psychological theories *ought* to only talk about observable, quantifiable phenomena (e.g. stimuli, responses, and patterns of reinforcement).

Note: These are not mutually exclusive.

IV. Carl Hempel's Logical behaviorism

(LB): Every meaningful psychological expression can be *translated without loss of content* using terms that specify only behavioral/observable phenomena

IV.0 Verificationism

(V): The semantic content of a (declarative) sentence is exhausted by its verification procedures.

IV.1 Hempel's Argument for Logical Behaviorism (from J. Kim)

- (1) Verificationism is true.
- (2) If a sentence has meaning, it must be intersubjective i.e. public.
- (3) Only physical/behavioral phenomena are available for securing the connection between the meanings of our words and the world.
- (4) So, the meanings of our psychological statements are to be specified in terms of the available physical/observable behaviors.

IV.2 Some Criticisms of Verificationism

- Verificationism is false, as there are semantically significant sentences for which there are no verification procedures.
- The meaning of a sentence cannot both be its verification procedures and inter-subjectively sharable, given that verification procedures are sensitive to background beliefs, which vary within individuals/communities.
- Verificationism is self-refuting.

IV.3 LB at work

Consider a psychological statement involving a mental term:

(P) Paul has a toothache.

The LBist claims that (P) is semantically equivalent to, or – weaker -- entails a sentence along the lines of:

(P*) Paul grimaces, holds his mouth, and/or responds “yes” when asked “Do you have a toothache?”

IV. A few criticisms of LB

- Exhibiting behaviors $B_1 \dots B_n$ is not *sufficient* for being in mental state M (e.g. pain).
e.g. the actor case
- Exhibiting behaviors $B_1 \dots B_n$ is not *necessary* for being in mental state M_i .
e.g. Hilary Putnam’s super Spartans
- Mental states cause and explain behavior, so mental states can’t be identified with behavior.

Consider the analogy to vacuous explanations of fragility.

- The mind is holistic; mental states cannot be paired 1:1 with proprietary behaviors. Any connection between, say, a subject’s beliefs/desires and an action are defeasible.